

Remarks

Claims 1-2 and 4-13 are currently pending. Applicants assert that all claims are in condition for allowance as set forth more fully below.

Interview Summary

A phone interview was conducted on June 1, 2006. During the interview the Laroia reference was discussed. In the Office Action, the Examiner had equated the “Phantom Tone” of Laroia with the “Phantom Frequency” as used in the Applicant’s specification. The claim language used the term “Beacon” frequency in place of Phantom frequency. Applicants pointed out that the Phantom Tone of Laroia was a frequency that was NOT transmitted on because it fell outside a prescribed bandwidth wherein the Phantom/beacon frequency discussed in the specification was, a frequency reserved for measuring signal strength between cell sites and was a frequency that was chosen because it was the least used in the cellular system.

103 Rejections

Claims 1-2 and 4-13 stand rejected under 35 USC §103(a) as being anticipated by Chawla (US Pat 6,496,700) in view of Laroia (US Patent 6,954,481). Applicants respectfully traverse these rejections.

The Office Action rejects independent claim 1 by stating that Chawla teaches most of their elements but concedes that Chawla does not teach selecting a frequency carrying the least amount of traffic across a plurality of cell sites and protecting the frequency from carrying traffic as set forth in claim 1. The Office Action asserts that Laroia cures the deficiency of Chawla. Laroia concerns itself with the generation of cell tower acquisition tones for cell phones.

In citing Laroia, the Office Action appears to be equating a “phantom tone” generated by a pilot tone hopping sequence to the least-used frequency as recited in independent claim 1. A pilot tone hopping sequence includes waveforms that are transmitted from a base station at regular timing intervals and in a particular frequency sequence (Col. 2, l. 51-56; Fig. 3).

Claim 1 recites:

“[a] method of measuring frequency interference between a plurality of cell sites in a wireless telecommunications system, the method comprising: selecting a frequency in first cell site to be used as a beacon frequency, wherein selecting a frequency includes selecting a frequency carrying the least amount of traffic across a plurality of cell sites and protecting the frequency from carrying traffic ...”

The recitations of claim 1 are contrary to the disclosure of Laroia. Laroia teaches the use of multiple beacon frequencies each of which appears to be preselected and each theoretically exists within a predetermined bandwidth. Laroia does not teach selecting the frequency carrying the least amount of traffic across a plurality of cell sites and protecting the frequency from carrying traffic as recited in claim 1.

Further, the Office Action seems to be focusing significance on Laroia’s teaching of “phantom tones” and directly asserts that “phantom tones” are equivalent to “frequencies carrying the least amount of traffic across a plurality of cells... and are protected”. Applicants acknowledge that phantom tones are not transmitted as part of the pilot tone hopping sequence but point out that Laroia does not teach that Phantom tones are purposely created as a form of protection of a frequency from carrying traffic.

Phantom tones are frequency “pulses” of a specific frequency that are prevented (i.e. clipped) from being generated outside the allowable bandwidth in a pilot tone hopping sequence because the period of the tone does not allow the specified number of pulses to be generated within the bandwidth limitations (i.e. the bandwidth is too small to accommodate the desired number of frequency-pulses). Laroia teaches that phantom tones are tones that are not generated or broadcast as part of the pilot tone hopping sequence. (Col. 5, l. 32-34). Therefore, because a phantom tone is at a frequency that is one of a set of predesignated frequencies from which traffic may be carried, a phantom tone of Laroia can not be selected as a beacon frequency as recited in the claims because it is not a “frequency carrying the least amount of traffic across a plurality of cell sites”. Further a phantom tone as in Laroia can not be transmitted at a beacon frequency because a phantom tone is not being transmitted.

For at least the above reasons, Laroia fails to disclose selecting a beacon frequency which “selecting a frequency carrying the least amount of traffic across a plurality of cell sites and protecting the frequency from carrying traffic” as recited in claim 1 and thus fails to make up for the deficiencies of Chawla. Accordingly, claim 1 includes recitations not taught by Chawla, Laroia or their combination and is allowable over the combination of Chawla and Laroia for at least these reasons. Dependent claims 2 and 4-13 depend from

allowable claim 1 and are also allowable over the combination of Chawla and Laroia for at least the same reasons.

Conclusion

Applicants assert that the application including claims 1-2 and 4-13 is in condition for allowance. Applicants request reconsideration in view of the remarks above and further request that a Notice of Allowability be provided. Should the Examiner have any questions, please contact the undersigned.

No fees are believed due. However, please charge any additional fees or credit any overpayment to Deposit Account No. 50-3025.

Respectfully submitted,

Date: June 6, 2006

A handwritten signature in black ink, appearing to read "Jeramie J. Keys", written over a horizontal line.

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